

U.S. Department of Labor

Occupational Safety and Health Administration
1600 167th Street Suite 12
Calumet City, Illinois 60408
(708) 891-3800



**COPY FOR YOUR
INFORMATION**

Thomas W. Orpciger
Director
Illinois Department of
Nuclear Safety
1035 Outer Park Drive
Springfield, IL 62704

Dear Mr. Orpciger:

Our office was contacted by the Environmental Protection Agency concerning an OSHA inspection of the 161 E. Grand Association, located in Chicago, Illinois. The case involved ionizing radiation from thorium which was embedded in the old flooring of the building. The contamination originated from a previous owner of the building, Lindsey Light, who made gas lanterns in the 1930's. The building has now been renovated and houses a business office environment.

The results of this investigation were shared with Vernita Simon, Larry Jensen, and Fred Mickey of the EPA, in which there was agreement that there is not an occupational over exposure to radiation.

However, there is still a concern regarding the general public exposure levels at this building. We are therefore requesting your assistance in evaluating the situation.

Enclosed are the sampling results from the OSHA investigation. If there are any questions, please contact Barb Smith of my staff at (708) 891-3800.

Sincerely,

Gary J. Anderson
Area Director

cc:
Vernita Simon, EPA V, OSC
William Wiehrdt, OSHA
Robert Williams, ATSDR

EPA Region 5 Records Ctr.



232059

**U.S. Department of Labor Occupational Safety and
Health Administration
1600 167th Street, Suite 12
Calumet City, IL 60409
(708) 881 - 3800
(708) 862 - 9659 (FAX)**



June 1, 1994

**Ron Steele
161 E. Grand Association
161 E. Grand Avenue
Chicago, IL 60611**

Dear Mr. Steele:

The results of the samples taken at the 161 E. Grand site on 1/12/94 and 2/23/94 indicated that employees in the facility were exposed to radon 220 (thoron) and radon 222 at Derived Air Concentrations (DAC) below the Nuclear Regulatory Commission's Ionizing Radiation Standards published in 10 CFR 20 Table 1 of Appendix B. Therefore no citation concerning ionizing radiation will be issued. The sampling result values are a conservative estimate which indicate the highest expected exposure, actual exposures are believed to be considerably lower. The sample results are as follows:

SAMPLE	CHEMICAL	RESULTS	DAC
1/12/94			
SAMPLE/RADON 222			
4th floor (control room)	Radon 222	1.2 pCi/L	30 pCi/L
4th floor (post production)	Radon 222	0.7 pCi/L	30 pCi/L
3rd floor (Cleo's office)	Radon 222	1.5 pCi/L	30 pCi/L
2nd floor (hallway)	Radon 222	2.6 pCi/L	30 pCi/L
Basement (close to chimney)	Radon 222	1.4 pCi/L	30 pCi/L
Basement (aisleway)	Radon 222	1.0 pCi/L	30 pCi/L

2/24/94
SAMPLE

4th floor (post production)	Radon 222	1.2 pCi/L	30 pCi/L
	Radon 220	0.10 WL* 13.0 pCi/L**	1.0 WL
3rd floor (Cleo's office)	Radon 222	1.5 pCi/L	30 pCi/L
	Radon 220	0.046 WL* 5.7 pCi/L**	1.0 WL
2nd floor (Cat's office)	Radon 222	2.6 pCi/L	30 pCi/L
	Radon 220	0.14 WL* 18.0 pCi/L**	1.0 WL
2nd floor (president's office)	Radon 222	3.1 pCi/L	30 pCi/L
	Radon 220	0.00 WL* 0.0 pCi/L*	1.0 WL
1st floor (Terry's desk)	Radon 222	1.4 pCi/L	30 pCi/L
	Radon 220	0.03 WL* 3.7 pCi/L**	1.0 WL
Basement (Lunchroom)	Radon 222	1.2 pCi/L	30 pCi/L
	Radon 220	0.04 WL* 5.5 pCi/L**	1.0 WL

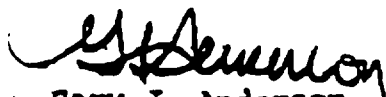
* - Exposure level after adjusting sample results with an factor of 125 pCi/L for a 6% equilibrium factor. This is a conservative estimate and represents the highest level expected in the building. Actual exposure is believed to be considerably less.

** - Actual measurement of thoron was sampled.

WL - Working levels
pCi/L - pico curies per liter
Radon 222 - Radon
Radon 220 - Thoron
DAC - Derived Air Concentration

Pursuant to 29 CFR 1910.20 you are required to provide your employees with a copy of these sampling results. If there are any additional questions regarding these sampling results, please feel free to contact the Calumet City Area Office.

Sincerely,

A handwritten signature in dark ink, appearing to read "G. J. Anderson", written over the typed name.

Gary J. Anderson
Area Director

GJA/bls

cc:
Eli Porte
Tom Nolan
Jim Dolan